INDEX TO

EXPERIMENTAL MECHANICS

Volume 29, 1989

TITLE INDEX

Algorithms for Integrated Photoelasticity — Axisymmetric Cases — P.B. Godbole and R.K. Murty Gutta, 40-48 (Mar.).

Applicability of the Southwell Plot to Plastic Buckling, On the — J. Singer, 205-208 (June).

Automated Measurement of Birefringence: Development and Experimental Evaluation of the Techniques — A.S. Voloshin and A.S. Redner, 252-257 (Sept.).

Basic Study of a Strain Gage Made of Nickel Foil, A — M. Seika and K. Hosono, 388-391 (Dec.).

Characterization of Crack-tip Strain Singularity in Brittle-microcracking Materials by Means of the Photoelastic-coating Method — T. Hashida, 307-311 (Sept.).

Complete Determination of the Stress Tensor in a Field Using Brittle Coatings — A.J. Durelli, 84-89 (Mar.).

Computerized Fringe Analysis in Photomechanics — T.Y. Chen and C.E. Taylor, 323-329 (Sept.).

Determination of Instrumented Impact Machine Compliance Using Unloading Displacement Analysis, The — K.J. Karisallen and J. Morrison, 152-156 (June).

Determination of Plastic Strains at Notches by Image-processing Methods — C. Lee, Y.J. Chao, M.A. Sutton, W.H. Peters and W.F. Ranson, 214-220 (June).

Determination of Thermal Strains by Moiré Interferometry — D. Post and J.D. Wood, 318-322 (Sept.).

Determining Fracture Parameters with Full-field Optical Method — R.J. Sanford, 241-247 (Sept.).

Determining Transverse Impact Force on a Composite Laminate by Signal Deconvolution — C. Chang and C.T. Sun, 414-419 (Dec.).

Development of a Measuring System for Segmented Ship Materials — A.M. Nawwar, A. Godon, T. Roots, I. Howard and I.M. Bayly, 101-108 (June).

Digital Image Correlation Using Newton-Raphson Method of Partial Differential Correction — H.A. Bruck, S.R. McNeill, M.A. Sutton and W.H. Peters III, 261-267 (Sept.).

Dilitational-wave-induced Pore-water Pressure in Soil — W.A. Charlie, G.E. Veyera and D.O. Doehring, 437-442 (Dec.).

Dynamic Crack Propagation Along a Weakly Bonded Plane in a Polymer — O.S. Lee and W.G. Knauss, 342-345 (Sept.).

Effect of an End Mass on Beam Damping, On the — G.G. Wren and V.K. Kinra, 336-341 (Sept.).

Effects of Fatigue and Environment on Residual Strengths of Center-cracked Graphite/Epoxy Buffer Strip Panels — C.A. Bigelow, 90-94 (Mar.).

Effects of Geometry on the Intensity of Transmitted Longitudinal Waves — C.I. Umeagukwu, W.H. Peters III and J.R. Dickerson, 95-100 (Mar.).

Elastic Displacements Along the Flanks of Internal Cracks in Rubber — P.S. Theocaris, D. Pazis and B.D. Konstantellos, 32-39 (Mar.).

Elastic-plastic Models of Surface Cracks in Tensile Panels — D.T. Read, H.I. McHenry and B. Petroski, 226-230 (June).

Enhancing Sensitivity of the White-light Speckle Method in Terrestial Applications — E. Conley and G.L. Cloud, 138-143 (June).

Experimental Determination of Stress-intensity Factors Using Caustics and Photoelasticity — R.V. Mahajan and D. Ravi-Chandar, 6-11 (Mar.).

Experimental Solid Mechanics in the Nineteenth Century — J.F. Bell, 157-165 (June).

Fatigue Life of Dovetail Joints: Verification of a Simple Biaxial Model — M.J. He and C. Ruiz, 126-131 (June).

Holographic Analysis of the Deformation of a Diesel Engine Piston — W.T. Evans and G.C. Premier, 455-459 (Dec.).

Hybrid Elastostatic and Thermostatic Analysis from Measured Data — H.H. Abdelmohsen, Y.M. Huang and R.E. Rowlands, 474-480 (Dec.).

Impact of Small-crack Effects on Design-life Calculations — E.P. Phillips and J.C. Newman, Jr., 221-225 (June).

Impact Testing of Concrete Using a Drop-weight Impact Machine — N. Banthia, S. Mindess, A. Bentur and M. Pigeon, 63-69 (Mar.).

Interfacial Transient Thermal Fracture of Adhesively Bonded Dissimilar Materials — K. Kokini and C.C. Smith, 312-317 (Sept.).

Investigation of Ball-on-Ball Impact — G. Laird II, 300-306 (Sept.).

Localized Flow of Nylon-6, 6 Rods Under Torsional Loading — J. Lipkin and E.A. Fuchs, 70-74 (Mar.).

Magic of Carrier Fringes in Moiré Interferometry, The — Y. Guo, D. Post and R. Czarnek, 169-173 (June).

Magnetostatic Deformation Experiment: Bending of a Thin Plate — N.S. Christopherson, M.O. Peach and J.M. Dalrymple, 432-436 (Dec.).

Maximum Distortion Energy Ellipse as a Biaxial Fatigue Criterion in View of Gradient Effects, The — E.G. Munday and L.D. Mitchell, 12-15 (Mar.).

Measurement of Stress Based Upon Universal Relations in Acoustoelasticity — W.Y. Lu and C.-S. Man, 109-114 (June).

Method for Designing Multiload Component Dynamometers Incorporating Octagonal Strain Rings, A — M. Kroencke and M.L. Hull, 195-204 (June).

Model Analysis of Box Culverts Subjected to Highway Loading — G.R. Frederick and K.M. Tarhini, 183-187 (June).

Moiré Holographic Analysis of Reinforced Plate Models — G. Di Chirico, F. Ginesu and R. Rossi, 420-423 (Dec.).

Moiré Interferometry for Simultaneous Measurement of U,V,W — A. Asundi, M.T. Cheung and C.S. Lee, 258-260 (Sept.).

New Bending Test Method of Advanced Composites, A — H. Fukuda, 330-335 (Sept.).

New Look at an Old Technique for the Measurement of Fatigue Crack-growth Panels, A — M.B. Cortie and G.G. Garrett, 291-294 (Sept.).

New Technique for the Determination of Stress-optical Constants Using the Shadow-spot Method, A — N.T. Younis and L.W. Zachary, 75-79 (Mar.).

Novel Impact Three-point Bend Test Method for Determining Dynamic Fracture-initiation Toughness, A — T. Yokoyama and K. Kishida, 188-194 (June).

Optimal Cam Profile Design Considering Dynamic Characteristics of a Cam-valve System, An — H.S. Jeon, K.J. Park and Y.S. Park, 357-363 (Dec.).

Optimized Hole Shapes in a Tall Beam — A.J. Durelli, S. Azarm and S. Bhandarkar, 424-431 (Dec.).

Photoplastic Stress Analysis Considering the Rate Effect — H. Ishikawa and S. Tadano, 49-53 (Mar.).

Plastic Strain Analysis of the Machined Surface Region Using Fine Grid Etched by Photoresist Technique — A.B. Sadat and M. Reddy, 346-349 (Sept.).

Real-time Moiré Interferometry — H.S. Johnson, J.A. Gilbert, D.R. Matthys and T.D. Dudderar, 231-236 (June).

Reduced Scale Model for Fixed Offshore Structures — N. Roitman, R.C. Batista and F.L.L.B. Carneiro, 372-377 (Dec.).

Relationship Between Impact Energy and Delamination Area, On the — S. Hong and D. Liu, 115-120 (June).

Residual-stress Measurement in SS304 Seamless Tube — M. Kovac, Y. Miyano and T.C. Woo, 209-213 (June).

Residual Stresses in Reverse-bend Test Samples for Stress-corrosion Testing — C.O. Ruud, D.J. Snoha and A.R. McIlree, 54-57 (Mar.).

Sensing-plate Method for Measuring Force and Duration of Impact in Elastic-plastic Impact of Bodies, A — M. Daimaruya, W. Naitoh, H. Kobayashi and S. Tanimura, 268-273 (Sept.)

Simple Orthotropic Elasticity-based Constitutive Model for Reinforced Concrete, A — W.K. Rule and R.E. Rowlands, 448-454 (Dec.).

Simulation of Stochastic Loads for Fatigue Experiments — J.D. Sorensen and R. Brincker, 174-182 (June).

Simulation of Three-point Bending at Large Deflections by an Elastoplastic Contact Analysis — J.W. Joo and B.M. Kwak, 460-465 (Dec.).

Small Scale Model of Line Pipe — F. Wing-Chau, 248-251 (Sept.).

Southwell and Lundquist Plots for Struts Suffering Subbuckling Cyclic Excursions — N. Taylor and P. Hirst, 392-398 (Dec.).
Strain-field Analysis Acquired Through Correlation of X-ray Radiographs of a Fiber-reinforced Composite Laminate — S.S. Russell and M.A. Sutton, 237-240 (June).
Stress-intensity Factors in Plates with a Partially Patched Central Crack — R. Chandra and A. Subramanian, 1-5 (Mar.).
Stress-optic Law in a Single Crystal and Its Application in Photoanisotropic Elasticity, T. Iwaki and T. Koizumi, 295-299 (Sept.).
Suitability of the Photoelastic Implementation of Polymers with Material Birefringence — S.S. Issa and G. Maamoun, 279-284 (Sept.).
Tensile Impact Test Apparatus for Composite Materials, A — D.F. Adams and L.G. Adams, 466-473 (Dec.).
Thermal Stress Analysis of a Concrete Pavement Without Expansion Joints — T. Hsiang-Te, 364-371 (Dec.).
Thermographic Analysis of Stress Concentrations in a Composite — D. Zhang and B.I. Sandor, 121-125 (June).
Three-dimensional Deformation Analysis of Workpieces Grasped by Chucks, A — T. Sawa, F. Nakagawa and K. Yamamoto, 443-447 (Dec.).
Three-dimensional Effects in Beams: Isodyne Assessment of a Plane Solution — M.-J. Pindera, J.T. Pindera and X. Ji, 23-31 (Mar.).
Three-dimensional Strain Field Measurement by Computer Analysis of Laser Interferograms — A.C. Lucia, M. Franchi, C.A. Marozzi and R. Fontana, 132-137 (June).
Transient Bending Waves in Anisotropic Plates Studied by Hologram Interferometry — K.-E. Fällström, L.-E. Lingren, N.-E. Molin and A. Wåhlin, 409-413 (Dec.).
Transient Bending Waves in Plates Studied by Hologram Interferometry — K.-E. Fällström, H. Gustavsson, N.-E. Molin and A. Wåhlin, 378-387 (Dec.).
Transition Range Drop Tower J-R Curve Testing of A106 Steel, J.A. Joyce and E.M. Hackett, 274-278 (Sept.).
Transmission of Pressure Waves in Partially Saturated Soils — C.A. Ross, P.Y. Thompson, W.A. Charlie and D.O. Doehring, 80-83 (Mar.).
Two-dimensional Moiré Method and Grid Method Using Fourier Transform — Y. Morimoto, Y. Seguchi and T. Higashi, 399-404 (Dec.).
Use of Stereo X-ray and Deply Techniques for Evaluating Instability of Composite Cylindrical Panels with Delaminations, The — A. Palazotto, G.E. Maddux and B. Horban, 144-151 (June).
Vibrational Aspects in Structural Fatigue Testing — S.-B. Lee and J.-C. Lee, 405-408 (Dec.).
Warping Functions of Regular Prismatic Bars Under Torsion Evaluation by Caustics, The — P.S. Theocaris, 285-290 (Sept.).
Whole-field Experimental Displacement Analysis of Composite Cylinders — W.H. Peters III, M.A. Sutton, W.F. Ranson, W.P. Poplin and D.M. Walker, 58-62 (Mar.).
Whole-field Optical Examination of Cylindrical Shell Deformations — S. Krishnakumar and C.G. Foster, 16-22 (Mar.).
Wide Range Stress-intensity-factor Expression for an Edge-cracked Round Bar Bend Specimen — J.H. Underwood and R.L. Woodward, 166-168 (June).
Wide-band Measurement of Frequency-dependent Viscoelastic Properties Using an Inverse Nyquist Plane Parameter Extraction Methodology — F.P. Sun and L.D. Mitchell, 350-356 (Sept.).

AUTHOR INDEX

Abdelmohsen, H.H. — Hybrid Elastostatic and Thermostatic Analysis from Measured Data, 474-480 (Dec.).
Adams, D.F. — A Tensile Impact Test Apparatus for Composite Materials, 466-473 (Dec.).
Adams, L.G. — A Tensile Impact Test Apparatus for Composite Materials, 466-473 (Dec.).
Asundi, A. — Moiré Interferometry for Simultaneous Measurement of U,V,W, 258-260 (Sept.).
Azarm, S. — Optimized Hole Shapes in a Tall Beam, 424-431 (Dec.).
Banthia, N. — Impact Testing of Concrete Using a Drop-weight Impact Machine, 63-69 (Mar.).
Batista, R.C. — Reduced Scale Model for Fixed Offshore Structures, 372-377 (Dec.).
Bayly, I.M. — Development of a Measuring System for Segmented Ship Materials, 101-108 (June).
Bell, J.F. — Experimental Solid Mechanics in the Nineteenth Century, 157-165 (June).
Bentur, A. — Impact Testing of Concrete Using a Drop-weight Impact Machine, 63-69 (Mar.).
Bhandarkar, S. — Optimized Hole Shapes in Tall Beam, 424-431 (Dec.).
Bigelow, C.A. — Effects of Fatigue and Environment on Residual Strengths of Center-cracked Graphite/Epoxy Buffer Strip Panels, 90-94 (Mar.).
Brincker, R. — Simulation of Stochastic Loads for Fatigue Experiments, 174-182 (June).
Bruck, H.A. — Digital Image Correlation Using Newton-Raphson Method of Partial Differential Correction, 261-267
Carneiro, F.L.L.B. — Reduced Scale Model for Fixed Offshore Structures, 372-377 (Dec.).
Chang, C. — Determining Transverse Impact Force on a Composite Laminate by Signal Deconvolution, 414-419 (Dec.).
Chao, Y.J. — Determination of Plastic Strains at Notches by Image-processing Methods, 214-220 (June).
Chandra, R. — Stress-intensity Factors in Plates with a Partially Patched Central Crack, 1-5 (Mar.).
Charlie, W.A. — Transmission of Pressure Waves in Partially Saturated Soils, 80-83 (Mar.).
Dilitational-wave-induced Pore-water Pressure in Soil, 437-442 (Dec.).
Chen, T.Y. — Computerized Fringe Analysis in Photomechanics, 323-329 (Sept.).
Cheung, M.T. — Moiré Interferometry for Simultaneous Measurement of U,V,W, 258-260 (Sept.).
Christopherson, N.S. — Magnetostatic Deformation Experiment: Bending of a Thin Plate, 432-436 (Dec.).
Cloud, G.L. — Enhancing Sensitivity of the White-light Speckle Method in Terrestial Applications, 138-143 (June).
Conley, E. — Enhancing Sensitivity of the White-light Speckle Method in Terrestial Applications, 138-143 (June).
Cortie, M.B. — A New Look at an Old Technique of the Measurement of Fatigue Crack-growth Panels, 291-294 (Sept.).
Czarnek, R. — The Magic of Carrier Fringes in Moiré Interferometry, 169-173 (June).
Daimaruya, M. — A Sensing-plate Method for Measuring Force and Duration of Impact in Elastic-plastic Impact of Bodies, 268-273 (Sept.).
Dalrymple, J.M. — Magnetostatic Deformation Experiment: Bending of a Thin Plate, 432-436 (Dec.).
Di Chirico, G. — Moiré Holographic Analysis of Reinforced Plate Models, 420-423 (Dec.).
Dickerson, J.R. — Effects of Geometry on the Intensity of Transmitted Longitudinal Waves, 95-100 (Mar.).
Doehring, D.O. — Transmission of Pressure Waves in Partially Saturated Soils, 80-83 (Mar.).
Dilitational-wave-induced Pore-water Pressure in Soil 437-442 (Dec.).
Dudderar, T.D. — Real-time Moiré Interferometry, 231-236 (June).
Durelli, A.J. — Complete Determination of the Stress Tensor in a Field Using Brittle Coatings, 84-89 (Mar.).
Optimized Hole Shapes in a Tall Beam, 424-431 (Dec.).
Evans, W.T. — Holographic Analysis of the Deformation of a Diesel Engine Piston, 455-459 (Dec.).
Fällström, K.-E. — Transient Bending Waves in Plates Studied by Hologram Interferometry, 378-387 (Dec.).
Transient Bending Waves in Anisotropic Plates Studied by Hologram Interferometry, 409-413 (Dec.).
Fontana, R. — Three-dimensional Strain Field Measurement by Computer Analysis of Laser Interferograms, 132-137 (June).
Foster, C.G. — Whole-field Optical Examination of Cylindrical Shell Deformations, 16-22 (Mar.).
Franchi, M. — Three-dimensional Strain Field Measurement by Computer Analysis of Laser Interferograms, 132-137 (June).
Frederick, G.R. — Model Analysis of Box Culverts Subjected to Highway Loading, 183-187 (June).
Fuchs, E.A. — Localized Flow of Nylon-6, 6 Rods Under Torsional Loading, 70-74 (Mar.).
Fukuda, H. — A New Bending Test Method of Advanced Composites, 330-335 (Sept.).
Garrett, G.G. — A New Look at an Old Technique for the Measurement of Fatigue Crack-growth Panels, 291-294 (Sept.).
Gilbert, J.A. — Real-time Moiré Interferometry, 231-236 (June).
Ginesu, F. — Moiré Holographic Analysis of Reinforced Plate Models, 420-423 (Dec.).
Godbole, P.B. — Algorithms for Integrated Photoelasticity — Axisymmetric Cases, 40-48 (Mar.).
Godon, A. — Development of a Measuring System for Segmented Ship Materials, 101-108 (June).
Guo, Y. — The Magic of Carrier Fringes in Moiré Interferometry, 169-173 (June).
Gustavsson, H. — Transient Bending Waves in Plates Studied by Hologram Interferometry, 378-387 (Dec.).
Hackett, E.M. — Transition Range Drop Tower J-R Curve Testing of A106 Steel, 274-278 (Sept.).
Hashida, T. — Characterization of Crack-tip Strain Singularity in Brittle-microcracking Materials by Means of the Photoelastic-coating Method, 307-311 (Sept.).
He, M.J. — Fatigue Life of Dovetail Joints: Verification of a Simple Biaxial Model, 126-131 (June).
Higashi, T. — Two-dimensional Moiré Method and Grid Method Using Fourier Transform, 399-404 (Dec.).

Hirst, P. — Southwell and Lundquist Plots for Struts Suffering Subbuckling Cyclic Excursions, 392-398 (Dec.).
Hong, S. — On the Relationship Between Impact Energy and Delamination Area, 115-120 (June).
Horban, B. — The Use of Stereo X-ray and Deply Techniques for Evaluating Instability of Composite Cylindrical Panels with Delaminations, 144-151 (June).
Hosono, K. — A Basic Study of a Strain Gage Made of Nickel Foil, 388-391 (Dec.).
Howard, I. — Development of a Measuring System for Segmented Ship Materials, 101-108 (June).
Hsiang-Te, T. — Thermal Stress Analysis of a Concrete Pavement Without Expansion Joints, 364-371 (Dec.).
Huang, Y.M. — Hybrid Elastostatic and Thermostatic Analysis from Measured Data, 474-480 (Dec.).
Hull, M.L. — A Method for Designing Multiload Component Dynamometers Incorporating Octagonal Strain Rings, 195-204 (June).
Ishikawa, H. — Photoplastic Stress Analysis Considering the Rate Effect, 49-53 (Mar.).
Issa, S.S. — Suitability of the Photoelastic Implementation of Polymers with Material Birefringence, 279-284 (Sept.).
Iwaki, T. — Stress-optic Law in a Single Crystal and Its Application in Photo-anisotropic Elasticity, 295-299 (Sept.).
Jeon, H.S. — An Optimal Cam Profile Design Considering Dynamic Characteristics of a Cam-valve System, 357-363 (Dec.).
Ji, X. — Three-dimensional Effects in Beams: Isodyne Assessment of a Plane Solution, 23-31 (Mar.).
Johnson, H.S. — Real-time Moiré Interferometry, 231-236 (June).
Joo, J.W. — Simulation of Three-point Bending at Large Deflections by an Elastoplastic Contact Analysis, 460-465 (Dec.).
Joyce, J.A. — Transition Range Drop Tower J-R Curve Testing of A106 Steel, 274-278 (Sept.).
Karisallen, K.J. — The Determination of Instrumented Impact Machine Compliance using Unloading Displacement Analysis, 152-156 (June).
Kinra, V.K. — On the Effect of an End Mass on Beam Damping, 336-341 (Sept.).
Kishida, K. — A Novel Impact Three-point Bend Test Method for Determining Dynamic Fracture-initiation Toughness, 188-194 (June).
Knauss, W.G. — Dynamic Crack Propagation Along a Weakly Bonded Plane in a Polymer, 342-345 (Sept.).
Kobayashi, H. — A Sensing-plate Method for Measuring Force and Duration of Impact in Elastic-plastic Impact of Bodies, 268-273 (Sept.).
Koizumi, T. — Stress-optic Law in a Single Crystal and Its Application in Photo-anisotropic Elasticity, 295-299 (Sept.).
Kokini, K. — Interfacial Transient Thermal Fracture of Adhesively Bonded Dissimilar Materials, 312-317 (Sept.).
Konstantellos, B.D. — Elastic Displacements Along the Internal Cracks in Rubber, 32-39 (Mar.).
Kovac, M. — Residual-stress Measurement in SS304 Seamless Tube, 209-213 (June).
Krishnakumar, S. — Whole-field Optical Examination of Cylindrical Shell Deformations, 16-22 (Mar.).
Kroencke, M. — A Method for Designing Multiload Component Dynamometers Incorporating Octagonal Strain Rings, 195-204 (June).
Kwak, B.M. — Simulation of Three-point Bending at Large Deflections by an Elastoplastic Contact Analysis, 460-465 (Dec.).
Laird II, G. — Investigation of Ball-on-Ball Impact, 300-306 (Sept.).
Lee, C. — Determination of Plastic Strains at Notches by Image-processing Methods, 214-220 (June).
Lee, C.S. — Moiré Interferometry for Simultaneous Measurement of U,V,W, 257-260 (Sept.).
Lee, J.-C. — Vibrational Aspects in Structural Fatigue Testing, 405-408 (Dec.).
Lee, O.S. — Dynamic Crack Propagation Along a Weakly Bonded Plane in a Polymer, 342-345 (Sept.).
Lee, S.-B. — Vibrational Aspects in Structural Fatigue Testing, 405-408 (Dec.).
Lindgren, L.E. — Transient Bending Waves In Anisotropic Plates Studied by Hologram Interferometry, 409-413 (Dec.).
Lipkin, J. — Localized Flow of Nylon-6, 6 Rods Under Torsional Loading, 70-74 (Mar.).
Liu, D. — On the Relationship Between Impact Energy and Delamination Area, 115-120 (June).
Lu, W.Y. — Measurement of Stress Based Upon Universal Relations in Acoustoelasticity, 109-114 (June).
Lucia, A.C. — Three-dimensional Strain Field Measurement by Computer Analysis of Laser Interferograms, 132-137 (June).
Maamoun, G. — Suitability of the Photoelastic Implementation of Polymers with Materials Birefringence, 279-284 (Sept.).
Maddux, G.E. — The Use of Stereo X-ray and Deply Techniques for Evaluating Instability of Composite Cylindrical Panels with Delaminations, 144-151 (June).
Mahajan, R.V. — Experimental Determination of Stress-intensity Factors Using Caustics and Photoelasticity, 6-11 (Mar.).
Man, C.-S. — Measurement of Stress Based Upon Universal Relations in Acoustoelasticity, 109-114 (June).
Marozzi, C.A. — Three-dimensional Strain Field Measurement by Computer Analysis of Laser Interferograms, 132-137 (June).
Matthys, D.R. — Real-time Moiré Interferometry, 231-236 (June).
McHenry, H.I. — Elastic-plastic Models of Surface Cracks in Tensile Panels, 226-230 (June).
McIlree, A.R. — Residual Stresses in Reverse-bend Test Samples for Stress-corrosion Testing, 54-57 (Mar.).
McNeill, S.R. — Digital Image Correlation Using Newton-Raphson Method of Partial Differential Correction, 261-267 (Sept.).
Mindess, S. — Impact Testing of Concrete Using a Drop-weight Impact Machine, 63-69 (Mar.).
Mitchell, L.D. — The Maximum Distortion Energy Ellipse as a Biaxial Fatigue Criterion in View of Gradient Effects, 12-15 (Mar.).
Wide-band Measurement of Frequency-dependent Viscoelastic Properties Using an Inverse Nyquist Plane Parameter Extraction Methodology,350-356 (Sept.).
Miyano, Y. — Residual-stress Measurement in SS304 Seamless Tube, 209-213 (June).
Molin, N.-E. — Transient Bending Waves in Plates Studied by Hologram Interferometry, 378-387 (Dec.).
Transient Bending Waves in Anisotropic Plates Studied by Hologram Interferometry, 409-413 (Dec.).
Morimoto, Y. — Two-dimensional Moiré Method and Grid Method Using Fourier Transform, 399-404 (Dec.).
Morrison, J. — The Determination of Instrumented Impact Machine Compliance Using Unloading Displacement Analysis, 152-156 (June).
Munday, E.G. — The Maximum Distortion Energy Ellipse as a Biaxial Fatigue Criterion in View of Gradient Effects, 12-15 (Mar.).
Murty Gutta, R.K. — Algorithms for Integrated Photoelasticity — Axisymmetric Cases, 40-48 (Mar.).
Naitoh, W. — A Sensing-plate Method for Measuring Force and Duration of Impact in Elastic-plastic Impact of Bodies, 268-273 (Sept.).
Nakagawa, F. — A Three-dimensional Deformation Analysis of Workpieces Grasped by Chucks, 443-447 (Dec.).
Nawwar, A.M. — Development of a Measuring System for Segmented Ship Materials, 101-108 (June).
Newman, Jr., J.C. — Impact of Small-crack Effects on Design-life Calculations, 221-225 (June).
Palazotto, A. — The Use of Stereo X-ray and Deply Techniques for Evaluating Instability of Composite Cylindrical Panels with Delaminations, 144-151 (June).
Park, K.J. — An Optimal Cam Profile Design Considering Dynamic Characteristics of a Cam-valve System, 357-363 (Dec.).
Park, Y.S. — An Optimal Cam Profile Design Considering Dynamic Characteristics of a Cam-valve System, 357-363 (Dec.).
Pazis, D. — Elastic Displacements Along the Flanks of Internal Cracks in Rubber, 32-39 (Mar.).
Peach, M.O. — Magnetostatic Deformation Experiment: Bending of A Thin Plate, 432-436 (Dec.).
Peters III, W.H. — Whole-field Experimental Displacement Analysis of Composite Cylinders, 58-62 (Mar.).
Effects of Geometry on the Intensity of Transmitted Longitudinal Waves, 95-100 (Mar.).
Determination of Plastic Strains at Notches by Image-processing Methods, 214-220 (June).
Digital Image Correlation Using Newton-Raphson Method of Partial Differential Correction, 261-267 (Sept.).
Petroski, B. — Elastic-plastic Models of Surface Cracks in Tensile Panels, 226-230 (June).
Phillips, E.P. — Impact of Small-crack Effects on Design-life Calculations, 221-225 (June).
Pigeon, M. — Impact Testing of Concrete Using a Drop-weight Impact Machine, 63-69 (Mar.).
Pindera, J.T. — Three-dimensional Effects in Beams: Isodyne Assessment of a Plane Solution, 23-31 (Mar.).
Pindera, M.-J. — Three-dimensional Effects in Beams: Isodyne Assessment of a Plane Solution, 23-31 (Mar.).
Poplin, W.P. — Whole-field Experimental Displacement Analysis of Composite Cylinders, 58-62 (Mar.).
Post, D. — The Magic of Carrier Fringes in Moiré Interferometry, 169-173 (June).
Determination of Thermal Strains by Moiré Interferometry, 318-322 (Sept.).
Premier, G.C. — Holographic Analysis of the Deformation of a Diesel Engine Piston, 455-459 (Dec.).
Ranson, W.F. — Whole-field Experimental Displacement Analysis of Composite Cylinders, 58-62 (Mar.).
Determination of Plastic Strains at Notches by Image-processing Methods, 214-220 (June).
Ravi-Chandar, D. — Experimental Determination of Stress-intensity Factors Using Caustics and Photoelasticity, 6-11 (Mar.).
Read, D.T. — Elastic-Plastic Models of Surface Cracks in Tensile Panels, 226-230 (June).

Reddy, M.G. — Plastic Strain Analysis of the Machined Surface Region Using Fine Grid Etched by Photoresist Technique, 346-349 (Sept.).
Redner, A.S. — Automated Measurement of Birefringence: Development and Experimental Evaluation of the Techniques, 252-257 (Sept.).
Roitman, N. — Reduced Scale Model for Fixed Offshore Structures, 372-377 (Dec.).
Roots, T. — Development of a Measuring System for Segmented Ship Materials, 101-108 (June).
Ross, C.A. — Transmission of Pressure Waves in Partially Saturated Soils, 80-83 (Mar.).
Rossi, R. — Moiré Holographic Analysis of Reinforced Plate Models, 420-423 (Dec.).
Rowlands, R.E. — A Simple Orthotropic Elasticity-based Constitutive Model for Reinforced Concrete, 448-454 (Dec.).
Hybrid Elastostatic and Thermostatic Analysis from Measured Data, 474-480 (Dec.).
Ruiz, C. — Fatigue Life of Dovetail Joints: Verification of a Simple Biaxial Model, 126-131 (June).
Rule, W.K. — A Simple Orthotropic Elasticity-based Constitutive Model for Reinforced Concrete, 448-454 (Dec.).
Russell, S.S. — Strain-field Analysis Acquired Through Correlation of X-ray Radiographs of a Fiber-reinforced Composite Laminate, 237-240 (June).
Ruud, C.O. — Residual Stresses in Reverse-bend Test Samples for Stress-corrosion Testing, 54-57 (Mar.).
Sadat, A.B. — Plastic Strain Analysis of the Machined Surface Region Using Fine Grid Etched by Photoresist Technique, 346-349 (Sept.).
Sandor, B.I. — Thermographic Analysis of Stress Concentrations in a Composite, 121-125 (June).
Sanford, R.J. — Determining Fracture Parameters with Full-field Optical Methods, 241-247 (Sept.).
Sawa, T. — A Three-dimensional Deformation Analysis of Workpieces Grasped by Chucks, 443-447 (Dec.).
Seguchi, Y. — Two-dimensional Moiré Method and Grid Method Using Fourier Transform, 399-404 (Dec.).
Seika, M. — A Basic Study of a Strain Gage Made of Nickel Foil, 388-391 (Dec.).
Singer, J. — On the Applicability of the Southwell Plot to Plastic Buckling, 205-208 (June).
Smith, C.C. — Interfacial Transient Thermal Fracture of Adhesively Bonded Dissimilar Materials, 312-317 (Sept.).
Snoha, D.J. — Residual Stresses in Reverse-bend Test Samples for Stress-corrosion Testing, 54-57 (Mar.).
Sorensen, J.D. — Simulation of Stochastic Loads for Fatigue Experiments, 174-182 (June).
Subramanian, A. — Stress-intensity Factors in Plates with a Partially Patched Central Crack, 1-5 (Mar.).
Sun, C.T. — Determining Transverse Impact Force on a Composite Laminate by Signal Deconvolution, 414-419 (Dec.).
Sun, F.P. — Wide-band Measurement of Frequency-dependent Viscoelastic Properties Using an Inverse Nyquist Plane Parameter Extraction Methodology, 350-356 (Sept.).
Sutton, M.A. — Whole-field Experimental Displacement Analysis of Composite Cylinders, 58-62 (Mar.).
Determination of Plastic Strains at Notches by Image-processing Methods, 214-220 (June).
Digital Image Correlation Using Newton-Raphson Method of Partial Differential Correction, 261-267 (Sept.).
Strain-field Analysis Acquired Through Correlation of X-ray Radiographs of a Fiber-reinforced Composite Laminate, 237-240 (June).
Tadano, S. — Photoplastic Stress Analysis Considering the Rate Effect, 49-53 (Mar.).
Tanimura, S. — A Sensing-plate Method for Measuring Force and Duration of Impact in Elastic-plastic Impact of Bodies, 268-273 (Sept.).
Tarhini, K.M. — Model Analysis of Box Culverts Subjected to Highway Loading, 183-187 (June).
Taylor, C.E. — Computerized Fringe Analysis in Photomechanics, 323-329 (Sept.).
Taylor, N. — Southwell and Lundquist Plots for Struts Suffering Subbuckling Cyclic Excursions, 392-398 (Dec.).
Theocaris, P.S. — Elastic Displacements Along the Flanks of Internal Crack in Rubber, 32-39 (Mar.).
The Warping Functions of Regular Prismatic Bars Under Torsion Evaluation by Caustics, 285-290 (Sept.).
Thompson, P.Y. — Transmission of Pressure Waves in Partially Saturated Soils, 80-83 (Mar.).
Umeagukwu, C.I. — Effects of Geometry on the Intensity of Transmitted Longitudinal Waves, 95-100 (Mar.).
Underwood, J.H. — Wide Range Stress-intensity-factor Expression for an Edge-cracked Round Bar Bend Specimen, 166-168 (June).
Veyera, G.E. — Dilitational-wave-induced Pore-water Pressure in Soil, 437-442 (Dec.).
Voloshin, A.S. — Automated Measurement of Birefringence: Development and Experimental Evaluation of the Techniques, 252-257 (Sept.).
Wåhlin, A. — Transient Bending Waves in Plates Studies by Hologram Interferometry, 378-387 (Dec.).
Transient Bending Waves in Anisotropic Plates Studied by Hologram Interferometry, 409-413 (Dec.).
Walker, D.M. — Whole-field Experimental Displacement Analysis of Composite Cylinders, 58-62 (Mar.).
Wing-Chau, F. — Small Scale Model of Line Pipe, 248-251 (Sept.).
Woo, T.C. — Residual-stress Measurement in SS304 Seamless Tube, 209-213 (June).
Wood, J.D. — Determination of Thermal Strains by Moiré Interferometry, 318-322 (Sept.).
Woodward, R.L. — Wide Range Stress-intensity-factor Expression for an Edge-cracked Round Bar Bend Specimen, 166-168 (June).
Wren, G.G. — On the Effect of an End Mass on Beam Damping, 336-341 (Sept.).
Yamamoto, K. — A Three-dimensional Deformation Analysis of Workpieces Grasped by Chucks, 443-447 (Dec.).
Yokoyama, T. — A Novel Impact Three-point Bend Test Method for Determining Dynamic Fracture-initiation Toughness, 188-194 (June).
Younis, N.T. — A New Technique for the Determination of Stress-optical Constants Using the Shadow-spot Method, 75-79 (Mar.).
Zachary, L.W. — A New Technique for the Determination of Stress-optical Constants Using the Shadow-spot Method, 75-79 (Mar.).
Zhang, D. — Thermographic Analysis of Stress Concentrations in a Composite, 121-125 (June)

U.S. Postal Service

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Required by 39 U.S.C. 3685)

1A. TITLE OF PUBLICATION	1B. PUBLICATION NO.	2. DATE OF FILING
EXPERIMENTAL MECHANICS	0 0 1 4 4 8 5 1	11/1/89
3. FREQUENCY OF ISSUE	3A. NO. OF ISSUES PUBLISHED ANNUALLY	3B. ANNUAL SUBSCRIPTION PRICE
Quarterly	4	$72

4. COMPLETE MAILING ADDRESS OF KNOWN OFFICE OF PUBLICATION *(Street, City, County, State and ZIP+4 Code) (Not printer)*

Society for Experimental Mechanics, Inc., 7 School St., Bethel, CT 06801

5. COMPLETE MAILING ADDRESS OF THE HEADQUARTERS OF GENERAL BUSINESS OFFICES OF THE PUBLISHER *(Not printer)*

Same as #4

6. FULL NAMES AND COMPLETE MAILING ADDRESS OF PUBLISHER, EDITOR, AND MANAGING EDITOR *(This item MUST NOT be blank)*

PUBLISHER *(Name and Complete Mailing Address)*

K.A. Gallone, Society for Experimental Mechanics, Inc., 7 School St., Bethel, CT 06801

EDITOR *(Name and Complete Mailing Address)*

Same as above

MANAGING EDITOR *(Name and Complete Mailing Address)*

M.E. Yergin, Society for Experimental Mechanics, Inc., 7 School St., Bethel, CT 06801

7. OWNER *(If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given. If the publication is published by a nonprofit organization, its name and address must be stated.) (Item must be completed.)*

FULL NAME	COMPLETE MAILING ADDRESS
Society for Experimental Mechanics, Inc.	7 School St., Bethel, CT 06801

8. KNOWN BONDHOLDERS, MORTGAGEES, AND OTHER SECURITY HOLDERS OWNING OR HOLDING 1 PERCENT OR MORE OF TOTAL AMOUNT OF BONDS, MORTGAGES OR OTHER SECURITIES *(If there are none, so state)*

FULL NAME	COMPLETE MAILING ADDRESS
None	

9. FOR COMPLETION BY NONPROFIT ORGANIZATIONS AUTHORIZED TO MAIL AT SPECIAL RATES *(Section 422.12 DMM only)*
The purpose, function, and nonprofit status of the organization and the exempt status for Federal income tax purposes *(Check one)*

(1) ☒ HAS NOT CHANGED DURING PRECEDING 12 MONTHS
(2) ☐ HAS CHANGED DURING PRECEDING 12 MONTHS

(If changed, publisher must submit explanation of change with this statement.)

10. EXTENT AND NATURE OF CIRCULATION *(See instructions on reverse side.)*	AVERAGE NO. COPIES EACH ISSUE DURING PRECEDING 12 MONTHS	ACTUAL NO. COPIES OF SINGLE ISSUE PUBLISHED NEAREST TO FILING DATE
A. TOTAL NO. COPIES *(Net Press Run)*	2562	2550
B. PAID AND/OR REQUESTED CIRCULATION 1. Sales through dealers and carriers, street vendors and counter sales	0	0
2. Mail Subscription *(Paid and/or Requested)*	2228	2215
C. TOTAL PAID AND/OR REQUESTED CIRCULATION *(Sum of 10B1 and 10B2)*	2228	2215
D. FREE DISTRIBUTION BY MAIL, CARRIER OR OTHER MEANS SAMPLES, COMPLIMENTARY, AND OTHER FREE COPIES	49	51
E. TOTAL DISTRIBUTION *(Sum of C and D)*	2277	2266
F. COPIES NOT DISTRIBUTED 1. Office use, left over, unaccounted, spoiled after printing	285	284
2. Return from News Agents	0	0
G. TOTAL *(Sum of E, F1 and 2—should equal net press run shown in A)*	2562	2550

11. I certify that the statements made by me above are correct and complete

SIGNATURE AND TITLE OF EDITOR, PUBLISHER, BUSINESS MANAGER, OR OWNER
K.A. Gallone Publisher

PS Form 3526, Dec. 1985 *(See instructions on reverse)*